

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

YELLOWSTONE NATIONAL PARK

YELLOWSTONE PARK, WYO.

E OF THE SUPERINTENDENT

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M O N T H L Y

R E P O R T

for

D E C E M B E R,

1919.

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DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

YELLOWSTONE NATIONAL PARK

YELLOWSTONE PARK, WYO.

OFFICE OF THE SUPERINTENDENT

January 9, 1930.

The Director,  
National Park Service,  
Department of the Interior,  
Washington, D. C.

Sir:

The following is my report on conditions in Yellowstone National Park and on the operation of the park for the month of December, 1919;

GENERAL CONDITIONS:

A  
December was divided into two nearly equal dissimilar periods, the first half of the month being characterized by extremely low temperature and excessive snowfall, while during the latter half only occasional light snows fell and the temperatures were mild. During the first 15 days there was an average daily deficiency in temperature of 30 degrees as compared with the normal. On the 9th the temperature was 31 degrees below zero and on the 13th 30 degrees below. The lowest previous record for December was -25 in 1900. The monthly mean temperature was 15.4 degrees, which is -5.2 below normal for December. A lower mean temperature for December has been recorded but twice, namely 12 degrees in 1909 and in 1916. The total snowfall of 27.7 inches is greater than for any other December on record except 33.9 inches in 1916 and 60.6 inches in 1889. Snow fell continuously from 12.30 P. M. on the 9th until 8.30 P. M. on the 11th. This storm was accompanied by high winds on the 10th and 11th, the maximum velocity for a five minute period reaching 40 miles per hour on the 10th and 39 miles on the 11th. As a result much drifting of the snow occurred. During the storm 11.6 inches of snow fell, and the average depth on the ground at the end of the storm was 24.0 inches, which is the greatest depth of snow on the ground in the December records, except that of 1916 when 28.0 inches of accumulated snow were recorded. The total precipitation reduced to water was 2.15 inches, which is 0.31 more than normal for December. The wind movement was considerably above that for the average December, while the sunshine was about the normal, taking the month as a whole. Monthly Meteorological Summary furnished

price up to the time the strike was over. Fortunately we had enough to last through the strike, and since it is over have had assurance from the mines in Montana that more will be shipped soon. The residents of the adjoining town of Gardiner were not so fortunate, but many of them were forced to burn coal slack from the old mines at Electric, 6 miles north of Gardiner, of which there is an unlimited supply that was left when these mines were operated for manufacturing coke. This slack was shipped by rail as far as Livingston, and gives fairly good results as a fuel so far as furnishing heat is concerned, but it has to be wet and mixed up and frozen before burning, and it is very dirty to handle and makes lots of work.

To assist in relieving the shortage, the people of Gardiner secured permission from the Service to open up a mine in the park. Their delegation looked over the coal mine on the north end of Mt. Sverts which has been opened and operated for our own use, and decided it would be too much work to get coal from it. Then after considerable prospecting, they decided to open up a vein which has shown in plain sight from the main road for many years. This vein is located about 60 feet east of the main road in the lower end of Gardiner River Canyon, about a mile south of the north entrance, and just across the Gardiner River from the road. This vein has been followed for about 60 feet by a shaft, and the representatives of the village are still working at it, with fair prospects of eventually getting into some good coal when they get in far enough to get away from the slack coal caused by its being too close to the surface, and back into the mountain where the weight on top is greater. As the coal shortage is by no means entirely relieved and some are still burning Electric slack, I have not thought it necessary to stop the operations of opening up this new mine. Its producers have done but little as yet to relieve the shortage, but the results of the prospecting work may be advantageous to the Government later. The coal that has been taken out is light and slacks so easily that it is hard to burn, and its value has thus far been much less than the cost of the work.

## II. PERSONNEL.

### Employees.

On December 1st there were 57 employees under this office; on December 31st there were 57. Below is given a list of the number of various classes of employees serving under appointment, with general statement of the kind of work performed by each class:

<u>No.</u>	<u>Class.</u>	<u>Kind of work performed.</u>
1	Asst. Engr.	Office engineering.
1	Blacksmith	General blacksmith work.
5	Clerks	1 disbursing agent and purchasing clerk; 1 on orders, proposals, and vouchers; 1 stenographer, files and revenues; 1 on payrolls and time-keeping; 1 on cost accounting and in charge of storehouse.
1	Steward & Master Transportation.	In charge of all transportation.
3	Electricians	1 in charge of power plant; 2 assisting in power plant.
1	Buffalo Keeper	In charge of tame buffalo herd.
1	Asst. Bflo. Keeper	Assisting buffalo keeper.
2	Foreman	1 in charge of all engineering work in park under direction of Superintendent; (now on leave) and 1 in charge of stables.
1	General foreman	In charge of construction crew.
1	Handyman	Work in commissary, rationing crews, etc.
1	Lineman	In charge of telephone system; did emergency work and installed instruments.
1	Watchman	Watchman at headquarters.
1	Master Mechanic	In charge of shops.



No.	Class.	Kind of work performed.
1	Mechanic	In charge of auto and truck repairs.
1	Plumber	In charge of general plumbing at headquarters.
1	Painter	In charge of general painting at headquarters.
1	Telegraph Opr.	Telegraph operator and switchboard (telephones) operator.
1	Telephone Oper.	Telephone switchboard operator.
1	Laborer	Miscellaneous work at headquarters.
28	Rangers	In charge of stations; on duty in Chief Ranger's Office; patrol duty; feeding wild animals.

In addition to the regular employees mentioned above, the following list of temporary laborers, teamsters, etc., were employed.

	On Dec. 1.	On Dec. 31.
Engineer	1	1
Teamster	1	1
Laborer	1	1
	<u>3</u>	<u>3</u>

#### Leaves of absence.

During December annual leave was granted as follows:

J. P. Brooks, Assistant Chief Ranger, 1 to 15; 13 days.  
 L. L. Mill, foreman, 24 to 31; 6 days.  
 W. A. Kelley, assistant Buffalo Keeper, 1 to 7; 6 days.  
 C. O. Lauer, clerk, 5 to 6; 2 days.  
 A. B. Crim, auto mechanic, 19 to 22 (noon) and 26 to 27; 4½ days.  
 B. L. Stinnett, master mechanic, 17 to 19; 3 days.  
 C. A. Brant, handyman, 8 (noon) to 11 (noon); 3 days.  
 W. Wiggins, plumber, 10 (noon) to 12; 2½ days.

#### Appointments.

August C. Neumann, painter, \$1800 per annum and

quarters, effective December 1, 1919, changing from temporary to permanent basis.

#### Separations.

There were no separations from the Service during the month of December.

#### Vacancies.

No vacancies existed in the regular force at the close of December.

### III. WORK COMPLETED.

#### (a) Construction of Physical Improvements.

No construction work was attempted during the month, as everything is on a winter basis.

#### (b) Maintenance and Repair of Physical Improvements.

As the park roads are all covered with a heavy blanket of snow, no maintenance work was necessary or possible. On warm days a few rocks continue to fall on the road through the Gardiner Canyon, due to the softening effect of the sun on the hillsides. These rocks are not numerous enough however to impede travel.

The few men who remain in the shop and garage are engaged principally in making repairs to auto trucks and other equipment, with the idea of having everything in first-class condition by the time construction work starts in the spring. The work of remodeling the old frame stable #47 which is to be used as a shelter for road machinery, is about finished, and most of such equipment is now under cover.

The office engineering work for the month consisted mostly of revising the office files of blue prints and tracings and cataloguing same; indexing and cataloguing field books; working up the notes and making plans and profiles of surveys made the past season.

#### Improvements by Concessioners.

The Yellowstone Park Canning Company brought in its crew from Tower Falls and discontinued construction work entirely on December 14. Since that time their operations have been confined to caring for buildings by a winter keeper, and the employment of one mechanic overhauling trucks and motor cars.

The Yellowstone Park Hotel Company did no work except care of buildings required of winter keepers, and the remodeling of a building for use as an ice house, which is partially completed.

The Yellowstone Park Transportation Company continued the employment of remodeling a large building at Mammoth for a new shop, and repairing the cornice of their big storage garage, and this work was practically completed. The carpenters also begun the work of changing the cornice of their bunk house which adjoins the garage and matches it in architecture, but this work was finally discontinued on account of bad weather.

They also employed a number of mechanics overhauling the White cars used for the transportation of tourists through the park, and a corps of painters on the same work until December 11, when their supply of fuel ran short, and they decided to close down everything until towards spring. Since the middle of December there has been in their employ in the park but one man who looks after the buildings and runs the mail stage between Mammoth and Gardiner.

Mr. George Whittaker got his new store building at Canyon under cover, but a heavy storm stopped all hauling of supplies on the road to Canyon, and he finally brought his crew in, on skis, about December 16, and discontinued his work to be finished next spring.

#### (d) Service to the Public.

As shown by the inclosed copy of the Chief Ranger's report, but 9 people visited the park during the month of December, all of whom came in but a short distance, via the northern entrance, on business or viewing the game.

#### IV. WORK IN PROGRESS.

The only work in progress by concessioners is as indicated above, in Par. III, namely the remodeling of a building for joint use of the Service, the Hotel Company, and the Camping Company, by a carpenter hired by the Hotel Company; and the overhauling of motor transportation by one mechanic hired by the Camping Company.

We still have a little work to do by regular employees to finish the remodeling of the stone stable south of our garage into a storehouse for equipment; and the work of remodeling a frame building for use as a paint shop is only a little over half done.



*Ice crop harvested near park*

This work, all of which is being done by regular employees, is now being delayed while the ice crop is harvested, as this work has to be done while the ice is of proper thickness and when weather conditions are right.

Regular patrols for protection of the game by rangers will be continued, also their special work of feeding hay to wild animals, surplus horses, and the tame buffalo herd.

A watchman was employed regularly during the month making night patrols to guard against danger of fire among our many valuable buildings at Headquarters.

Ranger Skinner made good progress collecting specimens and preparing them for our Museum, collecting and filing literature for information bureau and museum, and was also called upon occasionally for regular work as a ranger when his services were needed.

#### V. WORK DONE.

The only work begun during the month was the harvesting of ice. A team and man were employed beginning December 23 in cleaning the snow off from the ice and marking it ready to be cut. On December 29 the actual work of cutting and putting it in the ice-houses was begun, and at the end of December 31 we had a total of 216 tons of ice harvested. The work is still going on. This work is being done in conjunction with the Hotel and Camping Companies, by our regular employees and teams with assistance of men employed and paid by these companies.

#### VI. PLANS OR PROPOSED WORK.

No new work has been planned for this month, but it is the intention to continue to completion the work of remodeling buildings as noted on previous pages of this report, complete the harvesting of the ice crop, secure new sawdust and haul it from the railroad to insure the keeping of the ice; continue the feeding of elk along the north line, spare horses in the pasture at Mammoth, and the tame buffalo herd on Slough Creek, by the ranger force. As the necessity for intensive patrols along the north line passed with the expiration of the open season for shooting elk in Montana on December 24, a ranger can be spared and will be stationed so long as needed near Electric, outside of the park in the Montana State Game Preserve, to look after the interests of the animals that stray outside. There are now 600 to 800 elk in that vicinity, and a small band of antelope insists on wintering there. We also have a number of haystacks in that vicinity, that are gradually being hauled into the park and fed, and these must be guarded to



some extent from elk and stock.

#### VII. POLICIES.

No new policies were adopted during the month.

#### VIII. COST OF OPERATION.

Cost reports for the month of December are inclosed herewith. The monthly expenses consist principally of the payment of salaries of regular employees on a winter basis. These employees are kept busy constantly doing necessary work incident to the care and operation of the plant, and on improvements or repairs to buildings or equipment, harvesting ice, feeding game, etc., when occasion demands.

#### IX. OTHER MATTERS OF INTEREST.

##### Wild Animals.

The apparent serious conditions for wintering our wild animals continued with the severe weather up to about the middle of December, but the moderation of the weather to a nearly normal status has been such a relief that prospects seem much more encouraging. The feeding of hay on a large scale was continued throughout the month, and it cannot be said that any of our animals are in a starving condition at the present time. The work of feeding has been difficult and onerous to our ranger force at times, due to the severe cold, and snow which prevented the use of trucks for hauling hay. About December 10 snow was so plenty and drifted on the road north of Gardiner to depths that stopped the use of the trucks. This necessitated getting in more teams for hauling hay, and this unexpected expense adds materially to the cost of the feeding. Five 4-horse teams have to be kept up at Gardiner constantly for this work, though towards the end of the month the snow had disappeared on the road enough so the use of two trucks was resumed. One team also was used daily feeding elk from Headquarters. The undivided attention of nine rangers was required daily including Sundays in doing this feeding.

Much more fuel and much more hay were required on account of the severe cold. At the Buffalo Farm it was found that the hay would not last until spring, and to provide for the contingency the surplus horses which were being wintered on Slough Creek were brought in to Mammoth at the end of December, where they will be fed baled hay the balance of the winter, and the hay left at Slough Creek - about 75 tons - will be used to feed the buffalo herd.

It is almost certain that at least 300 tons more of alfalfa hay will be needed near the north boundary, to bring the elk, deer, and antelope, that are being fed, through in good shape. The lowest quotations received on this hay is \$38 per ton at Gardiner.

Buffalo, wild herd. Four of the wild buffalo were seen by Ranger Winn, from Soda Butte Station, the latter part of the month. He reports they are in apparent good condition, but as usual, very wild.

Buffalo, tame herd. At the end of November this herd numbered 413 head. On December 6 an old bull was found dead near the road between Tower Falls and the Lamar Bridge, near Junction Butte. The body was so mutilated that the manner of death could not be determined, and the skin was of no use as a specimen. This leaves 412 animals in the herd. 366 of these were fed hay at the buffalo farm, about 60 tons being used for the purpose. The balance of the herd was scattered in various places, several of them being at Headquarters and near Gardiner most of the month. All were taken to Slough Creek about January 1, and since then they have had better luck keeping them together. Many of them are dangerous to have around where there are many people. Two elk were cornered and killed by them during the month - one near Headquarters and the other at the Gardiner Ranger Station. Several of them frequented the main road between Headquarters and Gardiner, making it dangerous to walk over the road. It also frequently happens that they gore some of our horses, more or less seriously.

Bears. No bears are to be seen during the severe winter months, as they hibernate.

Antelope. The antelope were fed daily with the elk, near the north entrance. One small band of about 35 insist upon remaining outside of the park, in the vicinity of Electric, where they seem to fare well and are not molested. About 250 were noted on the feeding grounds. A tame antelope which frequents the buffalo farm was kicked in the head by a horse and killed.

Deer. About 50 deer were fed with the elk near Gardiner, and about the same number near Mammoth. Generally speaking they are in good condition. They are often seen in other parts of the park, and all of them do not come in to be fed. About two hundred were seen during the month. A young male deer doe was found dead in our reservoir, frozen slightly into the ice. She was in good



condition and had evidently gotten into the water and was unable to escape due to the high concrete walls above the water's edge.

Elk. The situation regarding the elk and the probability of their extermination has considerably improved with the milder condition of the weather. Since it moderated about the middle of December, the elk have seemed less anxious to go down, and in fact towards the end of the month they seem to be in many cases working up back towards the park. The Montana open season ended the night of December 24, and while there were elk killed every day up to the last minute, the last two weeks of the season the slaughter was not so great, and the enthusiasm of hunters seemed to have subsided to a great extent. Doubtless most of those who wanted to hunt were on the ground earlier in the season, and then the curtailed train service on the Park Branch, December 12 to 18 had the effect of discouraging travel and it did not revive before the end of the open season. Chief Ranger McBride's estimates as to the number of elk lost to the herd during the fall to include the end of the hunting season is 7,000 head, of which he thinks 4,000 were killed by hunters and shipped out by express; about 1,000 killed by hunters who live in Gardiner, Gardiner, and the Yellowstone Valley as far north as Pray, Montana, and 2,000 wounded by hunters and died later from their wounds.

Feeding of elk. About 4,500 were fed hay at Gardiner, using 154 tons hauled by rangers - some of it being hauled as far as 10 miles, 1,500 fed by one ranger from Headquarters, requiring 36 tons of baled alfalfa, 500 to 1,500 on Slough Creek where 75 tons of hay were fed (50 horses were also fed out of this hay during December), a total of 224 tons of hay was fed to about 7,500 wild animals (mostly elk) during the month.

On December 6 about 500 head of elk were found in the game preserve, just outside of the entrance arch at Gardiner, and were driven back fearing they would cross the river and get into the territory where shooting was permitted by the State. These was repeated several times, but they insisted upon going out constantly, and it was found they were content in the game preserve and that few of them crossed the river. There are now about 500 to 600 elk in the valley west of the Yellowstone River just north of the park line. They seem contented here, but are a great nuisance to the farmers, damaging their fences and haystacks and causing considerable loss. In their crossing back and forth into the park at Gardiner, six were killed during December by being impaled on the steel picket fence near the entrance arch. One was gored to death by a buffalo at Gardiner and another was killed in the same manner at Mammoth. A tame elk known as "Billy" wandered in from the Buffalo Farm where he was raised, and has taken up his



abode at Headquarters where he is petted and photographed to his heart's content by everybody.

The elk seen and reported during the month were about as follows: 4,500 at Gardiner being fed; 1,200 at Headquarters and vicinity; 1,200 between Lava Creek and Tower Falls; 200 between Tower Falls and Lower Bridge; 500 to 1,500 between Lower Bridge and the park line on Slough Creek; 200 Lamar Canyon to Pebble Creek, and 25 on Cache Creek; 40 at Morris Basin; a total of about 10,000 inside of the park. No attempt was made to make a complete count, and it is known that there are considerable herds west from Headquarters that were not seen at all. Several thousand are also outside of the park, but no definite idea as to their number can be had at the present time.

Special care of elk. The most important work of our rangers this winter is in giving special care and feeding to the large herds of elk that are threatened with extermination by the shortage of natural feed and the severe winter weather. This unusual condition together with the great slaughter due to the extension by Montana of its open season for Park County, has caused nation wide comment, and efforts are being made in all directions to find a satisfactory solution of the problem of just how many elk the Government should sustain and how the herds and the surplus should be handled. In this the United States Biological Survey, the Forest Service, the National Park Service, and the State authorities are all interested. Now that the open season is over, the State and Forest Service have placed extra men on patrol work to see that the game laws are not violated, and since the beginning of the year we have had one ranger (Neese) stationed in the State Game Preserve at Electric for the same purpose and to give special attention to any of our valuable antelope that may insist upon wintering there. Notwithstanding the fact that the past open season for elk in which probably nearly 5,000 elk have been slaughtered, has brought many thousand dollars (estimated at between \$50,000 and \$100,000) into the sparsely settled country for 25 miles down the Yellowstone Valley from the park, the inhabitants through their representatives in the stockgrowers associations seem very much against any measures that will tend to promote the interests of the wild elk, and are against any measures of acquiring hay ranches or range for the elk that winter outside of the park.

Gallatin elk herd. From the best reports I can get relative to this herd, practically all of them numbering about 1,000 are wintering outside of the park, down the West Gallatin River, where the range is better than it is on this side of the divide as it was reserved for the game by the Forest Service. Hunters killed

about 300 elk from this herd last fall during the open season.

Southern herd. I have no direct information as to the welfare of this herd during the month. They all winter outside of the park, and are fed hay at the farms maintained by the Biological Survey under direct management of Mr. D. C. Nowlin.

1319201  
An investigation was made of the condition of the elk wintering in the vicinity of Dome Mountain, about 20 miles north of the park, on the advice from the Chief of the Biological Survey conveyed to me by telegram December 31. Assistant Chief Ranger Trischman spent several days in that vicinity and returned with the report that the elk there were in number about 600; that they were looking as well as usual at this time of the year, none dying, and that apparently they were getting enough to eat. That a band of 1,200 sheep had been brought through the winter thus far on the same range with feeding, and still looked well, and that quite a number of horses were also wintering there without being fed. As to the feasibility of feeding them in case they need it, it would appear to be impracticable unless they were to be drifted to Cedar Creek where there is shelter and they could be fed without interference by stock. If fed in the vicinity of Dome Mountain the range stock would take most of the hay and interfere too much with the feeding of the elk. About 4,500 elk were noted by our rangers while making this investigation, including those on Grevice Mountain, and around Jardine, and they did not cover the country thoroughly.

The above reports taken together would indicate that we still have not less than 15,000 elk in our northern herd, and doubtless there are several thousand more that were not noted.

Shipment of elk. On December 3 twelve elk were shipped to the City Park of St. Louis, Mo., under authority contained in your letter of September 24. These were crated and shipped by express, local. They consisted of ten 2-year-old females and two 3-year-old males.

On December 5 two female yearlings and one male 2-year-old were shipped, crated, by express, to Platt National Park, Sulphur, Oklahoma, under authority September 20. I had a wire from the park superintendent December 10 that they were received in good condition.

On December 15 a carload of 65 were shipped by express to Palisades Interstate Park, New York, under authority of November 28. These were caught and shipped under the direction of Mr.



Howard Eaton, who accompanied the shipment.

There are prospects of shipping about 300 more elk this month under recent advices from you regarding the wants of Canada, and a report seen in the newspapers yesterday that Salt Lake City had asked for about a hundred for Utah.

Mountain Sheep. Eighteen mountain sheep were seen on Mount Everts, and 7 in the vicinity of Tower Falls Ranger Station. These on Mt. Everts come down to the Gardiner River daily to drink, and are frequently seen at close quarters from the main road.

Moose. Moose were seen near Cooke, Mont., and also near Yellowstone, Montana, during the month.

Carnivorous animals. Many coyotes have been seen, and signs of wolves have also been noted. Rangers from stations have been brought in to assist in feeding hay so Ranger Henry Anderson and Ranger Court Dewing could devote their time to hunting and trapping these animals; Anderson has been so engaged since December 25, and Dewing is now preparing to get out into the field with his traps.

#### Grazing.

In a few cases the elk are finding sufficient grazing on their winter feeding grounds to keep them and do not come in for hay, but in the lower country, beginning about a mile north of Mammoth, there is not much for them due to the drouth of last summer.

#### Birds.

More ducks and other water-fowl are noted on the streams that are warm than have been seen for several years past.

#### Fish.

The only fishing was in Gardiner River, and a little in the lower Madison and Firehole, and there was but little fishing done during the month by anybody.

#### Protection of game.

The special patrols were kept up on the park lines until the hunters left the country about December 25. Immediately after the close of the hunting season, Crevice Station was abandoned, and one of the rangers (Dupuis) brought to Gardiner to assist in feeding the game, and the other (Reese) stationed at Electric to



do special work there of caring for the elk and antelope outside of the park in the Montana Game Preserve.

#### Arrests and violations of the law.

On December 1, John J. Jackson, of Jackson, Montana, was tried before the United States Commissioner charged with hunting in the park. This arrest was made by Ranger Burton Reese. He was fined \$25 and costs of the case.

On December 2, Berl Herod, of Laurel, Montana, was tried before the Commissioner charged with killing an elk in the park. This arrest was made by Chief Ranger McBride. He was found guilty and fined \$100 and costs, and made to forfeit his rifle, as provided for by the law.

#### Special visitors.

Special visitors coming to Mammoth on business were Mr. L. C. Hurtt, grazing expert of the U. S. Forest Service Office at Missoula, Montana, on December 10.

Mr. Howard Eaton for the carload of elk for Palisades Park on December 13 and 14.

Mr. Nelson Story, Jr., and Mr. J. L. DeHart, of the State Game Department of Montana, on December 24.

#### Miscellaneous.

Picture shows were held weekly at the Post Exchange at Headquarters, under co-operative arrangements of employees and residents of Mammoth and Gardiner, Mont.

Church services were held every Sunday in the Chapel.

There was a community Christmas Tree in the Post Exchange on the night of the 23rd.

#### X. RECEIPTS AND REMITTANCES.

The usual report of monies collected, due and transmitted, together with money orders and checks totaling \$94.18, as called for by forms 10-59 and 10-60, is inclosed. Please acknowledge receipt.

Cordially yours,

CHAS. A. LINDLEY

INCL.

ASTOR BOOKS AND PAPERS.

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

YELLOWSTONE NATIONAL PARK

YELLOWSTONE PARK, WYO.

VICE OF THE SUPERINTENDENT

January 13, 1920.

Dear Sir:

Reference to my monthly report for December, 1919, forwarded under date January 9, 1920, please correct line 15, page 13, which now reads: "the same range with feeding, and still looked well, and that quite" so it will read: "the same range without feeding, and still looked well, and that quite."

Cordially yours,

WILLIAM A. LUDWIG

Acting Superintendent.

The Director,  
National Park Service,  
Department of the Interior,  
Washington, D. C.

WAL:SEN

The following animals were shipped last month:

200 elk were shipped to the Canadian Government.

(20 bulls and 180 cows)

3 elk were shipped to The Agriculture College of Texas.

(1 bull and two cows)

3 elk were shipped to Minneapolis, Minnesota.

elk (1 bull and two cows)

4 ~~elk~~ were shipped to Aurora, Illinois.

1 (4 cows)

✓ 1 buffalo was shipped to Aurora, Illinois, *June 21, per J. H. 16*

(1 bull) *county 6*

Total 22 Bull elk, 188 cow elk, and 1 bull buffalo.



*Inspected and all all but a good condition  
a hand more say*

✓ The hay crew at Gardiner using two trucks and two teams hauled a total of 311 tons of hay to the elk on their feeding grounds near Gardiner. They fed between 3,000 and 4,000 head of elk, 75 head of deer and 250 head of antelope.

✓ Ranger Lawson hauled 35 tons of hay from the barns at Headquarters to the feeding grounds in the vicinity of Headquarters. He fed about 1,200 head of elk, 15 head of deer, and 1 buffalo.

✓ Buffalo Keeper Lacombe fed 64 tons of hay to 384 buffalo during the month at the buffalo ranch.

✓ A total of 106 elk were found dead on or near the feed grounds during the month. Six of these elk were killed while catching elk for shipment. Of those found dead 86 were calves, 16 were cows and 4 were bulls. It is hard to say what the cause of death ~~was~~ was. Two rangers spent two days with a motor truck in hauling these dead elk away from the feed grounds and road.

During the month 14 coyotes, 3 wolves, and one fox were killed by Rangers Anderson and Dewing. Two of the wolves and about half of the coyotes were females.

✓ Ranger Reese reports that 154 deer are wintering outside of the park, between Gardiner and Corwin Hot Springs. He also reports that there are 84 antelope outside the park in his district. He counted 17 dead elk in his district and all of them had died of gun shot wounds.

✓ Chief Ranger McBride, Assistant Chief Ranger Trischman, and Ranger Dupuis, spent the last week of the month in patrolling the country north of the park line in the vicinity of Gardiner, Jardine, Electric, and Crevice. They report 1,678 elk all in good condition in this country, and that the elk are returning to the park in large numbers. They counted 199 dead elk all having died of wounds caused by gun shot. They did not find one winter killed elk.

A total of 107 mountain sheep were counted during the month. 33 mountain sheep were found north of the Yellowstone River, and 54 sheep were found south of the Yellowstone River.

✓ Rangers Winess and Frazier report having seen 61 of the wild buffalo in the Pelican country during the month. 4 of these buffalo were calves. The old buffalo were in good condition, but the calves were in very poor condition. These men also saw 8 moose on their trip to the Upper Yellowstone Country.

YELLOWSTONE  
NATIONAL PARK  
LIBRARY

4619

*9 visitors*

*Moose found*